

# **MERCER COUNTY**



## **ENVIRONMENTAL HEALTH ASSESSMENT**

### **AND IMPROVEMENT PLAN**

**2006**

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## Introduction

The Mercer County Environmental Health Assessment and Improvement Plan has been developed by the Mercer County Division of Public Health (MCDPH) to identify the most salient environmental issues within Mercer County and to propose a plan to address these issues for calendar year 2006. The MCDPH is a county environmental health program that derives authority pursuant to New Jersey Statutes Annotated NJSA 26:3A2-21 *et seq.* and is the certified county agency for the provision of environmental health services within Mercer County under the auspices of the County Environmental Health Act (CEHA).

Mercer County has a land area of 226 square miles and is located midway between New York City and Philadelphia. Mercer County encompasses the City of Trenton, Townships of East Windsor, Ewing, Hamilton, Hopewell, Lawrence, Princeton, Washington, and West Windsor and the Boroughs of Hightstown, Hopewell, Pennington, and Princeton.

Mercer County has a population of 365,271 residents. Between 1990 and 2004 the population grew by 14,510 persons, or 4.1%. One-tenth of the US population resides within a 75 miles radius of Trenton, the capital city of New Jersey. In Mercer County there are 1,552 residents per square mile, which is higher than the state average of 1,134 per square mile. Based on Census data this number is trending upward. Even though the transportation infrastructure in Mercer County is very strong the data suggest that an integrated approach to public health, environmental health, planning and infrastructure has to be achieved.

Hazardous air pollutants (HAPs) are chemicals, which can cause adverse effects to human health and the environment. Almost 200 of these chemicals have been identified, including chemicals that can cause cancer or birth defects. To help identify air quality problems, the U.S. Environmental Protection Agency estimated the concentration of HAPs in every locality in the U.S. (over 60,000 census tracts).

From 1988 to 2002, Mercer County ranked fourth in New Jersey among counties reporting the release of Toxics Release Inventory (TRI) chemicals into the environment with 2,436,637 tons. The three main TRI chemicals reported were hydrochloric acid, hydrofluoric acid and sulfuric acid.

Mercer County ranked in the top 90 percent of US counties in terms of the number of people living in areas where cancer risk from hazardous air pollutants exceeds 1 in 10,000. In Mercer County residents face a cancer risk more than 100 times the goal set by the Clean Air Act:

- 92% of the air cancer risk is from mobile sources
- 4.1% of the air cancer risk is from area sources
- 3.6% of the air cancer risk is from point sources

MCDPH works in cooperation with New Jersey Department of Environmental Protection (NJDEP), New Jersey Department of Health and Senior Services (NJDHSS), local health departments, three county HAZMAT Teams, and four county agencies (Planning, Office of Emergency Management (OEM), Mercer County Improvement Authority (MCIA) and the Department of Transportation and Infrastructure).

## Strategic Environmental Goals

### 1. Goal: Clean Air

*The air throughout Mercer County will be healthful to breathe, and air pollutants will not damage our forests, land and water bodies.*

**Milestones:** By 2007, air throughout Mercer County, in accordance with the State, will meet national Clean Air standards for ozone and other pollutants.

**Activities:** MCDPH will continue to investigate all air pollution complaints received from citizens and NJDEP. These investigations will include, but are not limited to, open burning, odors, particulates, idling diesel vehicles, permits and certificates.

MCDPH will continue to administer an Air Pollution Control Program pursuant to authority delegated by the Commissioner of NJDEP under the County Environmental Health Act (CEHA).

MCDPH will continue to perform regular inspections of delegated minor and B source facilities, for compliance with the New Jersey Air Pollution Control Code, and to enforce state laws and/or regulations.

MCDPH will continue to focus on the completion of annual routine compliance monitoring inspections as delegated by NJDEP.

MCDPH will inspect a predetermined number of Mercer County High Schools and Middle Schools to see how their science laboratories order, use and store chemicals and other hazardous material. HAZMAT and CEHA inspectors will work together on this new endeavor for 2006.

### 2. Goal: HAZMAT/Emergency Response

*Mercer County will be free from unacceptable human health and ecological risks due to direct exposure from hazardous substances and other potentially harmful agents. Natural resources will be managed to protect the public from floods, fires and storms.*

**Milestones:** Progressively reduce the number and impact of serious hazardous material incidents occurring within Mercer County by improving the response capabilities, training, knowledge and cooperation with industry.

**Activities:**

MCDPH (via the three local HAZMAT teams) will continue to respond to all hazardous material emergencies referred by citizens, local authorities and NJDEP.

HAZMAT responded to over 200 calls for service in 23 municipalities calls ranged from fluid spills on the roadway to suspected biological agents.

All three HAZMAT teams were recently evaluated by the New Jersey State Police in the areas of training, operating procedures, vehicles, equipment, communications, decontamination, and intervention, staffing and financial. The survey found that the Mercer County Hazmat Team meets the standards for a Type 1 Hazmat Entry team as established by the U.S. Department of Homeland Security. Also stated in the report is “the team is experienced, well trained, and well equipped”.

HAZMAT currently has just over 100 responders trained by the New Jersey State Police to the Technician level. The Trenton team is made up of full time firefighters on duty 24 hours a day 7 days a week at any given time 10 to 15 HAZMAT technicians are on duty. The West Windsor and Hamilton teams are made up of police and fire personnel some of which are on duty staffing levels fluctuate daily others are on call back status. Although the teams have primary first response areas in the county all three teams cross boundaries and support each other routinely.

HAZMAT response teams will continue to assess environmental health threats and provide sampling of the environment at the site of a hazardous materials incident/emergency during the period of the emergency only.

HAZMAT response teams, in the event of a BT/HAZMAT incident, will respond to the threat, which might eventually lead to violations of Air, Water, Solid Waste, and/or Noise program. The Lead Agency, in coordination with the appropriate NJDEP office, after the incident shall be responsible for the prevention, mitigation and remediation of the exposed area.

HAZMAT response teams have upgraded their equipment inventory through NJDEP grant funds. (i.e. Three new HAZMAT vehicles and Personal Protective Equipment) The team is looking forward to taking delivery of an infrared sensor (Sensor IR) to do field analysis of unknown chemical and biological agents. The sensor IR will greatly reduce the testing time at HAZMAT scenes. Meters, and WMD detection equipment purchased with the 00-01

Domestic Preparedness Grant will be maintained with required calibration and software upgrades.

HAZMAT response teams are currently working with the Mercer County Office of Emergency Management to provide a comprehensive and effective response to emergency incidents. This has proved to be an improvement in coordination between local, county and state agencies.

HAZMAT response teams are currently participating with OEM, local health departments, and the MCDPH in tabletop exercises for natural disasters, BT incidents, and health outbreaks.

HAZMAT response teams will continue to maintain a core of trained and equipped personnel who are capable of responding to hazardous materials incidents.

### **3. Goal: Solid Waste Program**

*To achieve and maintain the safe management of wastes in an environmentally sound manner.*

**Milestones:**        **Exposure to environmental risks will be controlled and minimized.**

**Activities:**        Investigate all solid waste complaints received from citizens, local health departments, commercial businesses and the NJDEP.

Conduct routine compliance monitoring inspections of Solid Waste Facilities (Class A, Transfer Stations, and Compost) as deemed necessary by the NJDEP, continue to update the list of these sites and provide them to the NJDEP Solid Waste Program.

Continue to monitor and investigate Solid Waste Haulers and enforce all applicable solid waste programs to the fullest extent permitted by law while utilizing the enhanced enforcement authority, capabilities, and penalties provided by the County Health Office, CEHA work plan, and CEHA statutory authority.

Consistency with the NJDEP Solid Waste Standard Operating Procedure (SOP) will be a priority for Mercer County's Solid Waste Program. Attaining uniform enforcement between the State and County, between Counties and between solid waste programs will be a goal of our CEHA solid waste initiatives. The MCIA has been selected to continue to manage the County Solid Waste Program, with the guidance and assistance of MCDPH staff.

Responding to citizen complaints will become a core component of the CEHA objective. To achieve this, the MCIA will conduct any and all necessary and appropriate training for all applicable staff, employees, and agents of MCIA regarding CEHA solid waste enforcement requirements, methods, and plans.

MCIA manages a countywide curbside recycling program for all county residents and will continue to do so. To further promote recycling, the MCIA will initiate inspections and conduct thorough surveys of all relevant Mercer County businesses and schools pursuant to the CEHA work plan, which will ensure compliance by these entities with all applicable state and to federal laws. Furthermore, this will ensure a decrease and discouragement of illegal dumping, and promote reusing, recycling, and reduction of solid waste materials in Mercer County.

MCIA is also responsible for implementing a countywide Household Chemical Waste Program. In the past there were two events per year. Due to the high demand, the MCIA will conduct three events in 2006.

MCIA will continue to inspections and investigations of Solid Waste Disposal Facilities, Recycling Facilities, Compost Sites, Resource Recovery Facilities, Landfills, Farmland Mulch Sites, and Intermodal Facilities pursuant to the CEHA work plan to ensure compliance by these entities with all applicable state and federal laws.

MCIA will continue to conduct Solid Waste Flow inspections and investigations of all appropriate entities to ensure compliance and enforcement.

MCIA will continue to apply state and federal laws with the assistance of CEHA statutory authority to enforce NJDEP regulations for solid waste control.

MCIA will continue to enforcement actions against Solid Waste Haulers in a court of competent jurisdiction, including but not limited to, any of the municipal courts within Mercer County. The purpose of the enforcement action is to maintain compliance with all applicable state and federal laws, the MCIA solid waste franchise and the Mercer County District Solid Waste Management Plan. It will obtain all appropriate penalties against said haulers while utilizing the enhanced enforcement authority, capabilities, and penalties provided by the Mercer County Office of

Environmental Health, CEHA work plan, and CEHA statutory authority.

MCIA will continue to deter, decrease, and cease Solid Waste Haulers from diverting waste from the Mercer County Solid Waste Flow System by entering into aggressive settlement agreements with said haulers whereby all applicable penalties are paid and future compliance with all applicable laws, the MCIA solid waste franchise and the Mercer County District Solid Waste Management Plan, is obtained.

MCIA will continue to conduct interviews of solid waste transporters referred by NJDEP or other counties and share needed information with said entities.

**4. Goal: Clean and Plentiful Drinking Water**

***Surface and ground water will be clean sources of potable water. Every person in Mercer County will have safe drinking water. Adequate quantities of surface and ground water will be available for all uses.***

**Milestones:**      **95 percent of the public, non-community water systems will provide water that meets and microbiological drinking standards.**

**Activities:**      MCDPH will perform regular inspections of delegated non-transient and transient PNC Water Systems in compliance with the Safe Drinking Water Act, N.J.S.A. 58:12A-1 et seq., and the rules and regulations adopted pursuant thereto, N.J.A.C 7:10-1 et seq.

MCDPH will continue to investigate all water pollution, water supply and potable water complaints from citizens and the NJDEP. These investigations will include, but are not limited to; potable water, water contamination, unpermitted discharges to surface water or ground water, improperly constructed wells, abandoned well, and septic system malfunctions.

MCDPH will continue to investigate all complaints that have an impact on the public health of Mercer County residents.

MCDPH will continue to education on water regulations and pollution prevention, as required for PNC Water Systems and citizen complaints, to achieve regulatory compliance.



**5. Goal: Noise Control**

***MCOEH will work with NJDEP and local authorities to enforce codes, rules and regulations relating to the control and abatement of noise, to improve the quality of life for Mercer County residents.***

**Milestones:**        **Control noise that unnecessarily degrades the quality of life and/or affects the health and safety of people of Mercer County.**

**Activities:**        MCDPH will continue to investigate noise complaints received from citizens and the NJDEP that are under the jurisdictions of the Noise Control Regulations, and if applicable, educate, and enforce these regulations to achieve compliance.

MCDPH will continue to provide education on noise regulations and noise prevention and abatement.

**6. Goal: Open and Effective Government**

***MCOEH will fulfill its vision and mission and achieve its goals through the involvement of citizens and stakeholders as critical partners and through the commitment to quality principles and methods as a means to continuous improvement of its operations.***

**Milestones:**        **MCDPH will improve the coordination of environmental health services vital to the health of all residents of Mercer County.**

**Activities:**        MCDPH will continue to encourage and develop strategic partnerships with the following organizations: local, state and federal agencies, nonprofit organizations, environmental commissions, the general public and the business community, to address environmental issues and concerns.

MCDPH will continue to provide education and outreach as well as environmental data to community groups and interested stakeholders.

MCDPH will continue to provide assistance and information to individuals, citizen groups, and the community at large.

MCDPH will continue to respond promptly and efficiently to complaints, and provide environmental health information requests from the public.

## **Staffing**

The Mercer County Division of Public Health staff that report directly to the Health Officer are: one Senior Registered Environmental Health Specialist (REHS), five LINCS staff and one office secretary. MCDPH has hired a second REHS to assume the additional responsibilities and activities laid out in this plan. In 2006, the MCDPH will add School Chemical Management Project to the existing CEHA program. The Mercer County Department Mercer County Division of Public Health (via Interlocal Service Agreements) has the support of the three County HAZMAT Teams, and 11 County Improvement Authority employees.